

CLAIMS

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:

1. An apparatus for separating entrained air and/or vapor from a liquid fuel comprising:

a base having an inlet port for receiving said fuel, an outlet port and a return port;
a filter element having an interior chamber in fluidic communication with said outlet port and said return port;

a draw tube in fluidic communication with said outlet port and extending to a lower area within said interior chamber of said filter element; and

a canister secured to said base and surrounding said filter element in fluidic communication with said inlet port;

wherein fuel with entrained air and/or vapor enters said inlet port of said base and said air and/or vapor separates from said fuel and accumulates at the top of said canister, said air and/or vapor passes through an upper portion of said filter element and exits through said return port in said base, said fuel passes through said filter element and exits through said draw tube to said outlet port.

2. The apparatus as set forth in claim 1 wherein a portion of said fuel passing through said filter element exits through said return port.

3. The apparatus as set forth in claim 1 wherein said filter element is mounted within said canister.

4. The apparatus as set forth in claim 1 wherein said filter element is generally cylindrically shaped.

5. The apparatus as set forth in claim 1 wherein said filter element is a paper filter.

6. An apparatus for separating entrained air and/or vapor from a liquid fuel comprising:

a base having an inlet port for receiving said fuel under pressure from a fuel tank, an outlet port for delivering said fuel to an engine, and a return port for returning said air and/or vapor to said fuel tank,

a generally hollow canister having a filter element secured with said canister, said filter element presenting an inlet area and an outlet area and having an upper portion and a lower portion,

said canister mounted to said base wherein said inlet area of said canister is in fluidic communication with said inlet port of said base, and said outlet portion is in fluidic communication with said outlet port and said return port of said base, and a generally hollow draw tube in fluidic communication with outlet port and extending to said lower portion of said filter element within said outlet area,

wherein fuel with entrained air and/or vapor enters said inlet port of said base and said air and/or vapor separates from said fuel and accumulates at said upper portion of said filter element, said air and/or vapor passes through said upper portion of said filter element from said inlet area to said outlet area and exits through said return port in said base, said fuel passes through said filter element from said inlet area to said outlet area, enters said draw tube and exits through said outlet portion of said base.